

No. 689,532.

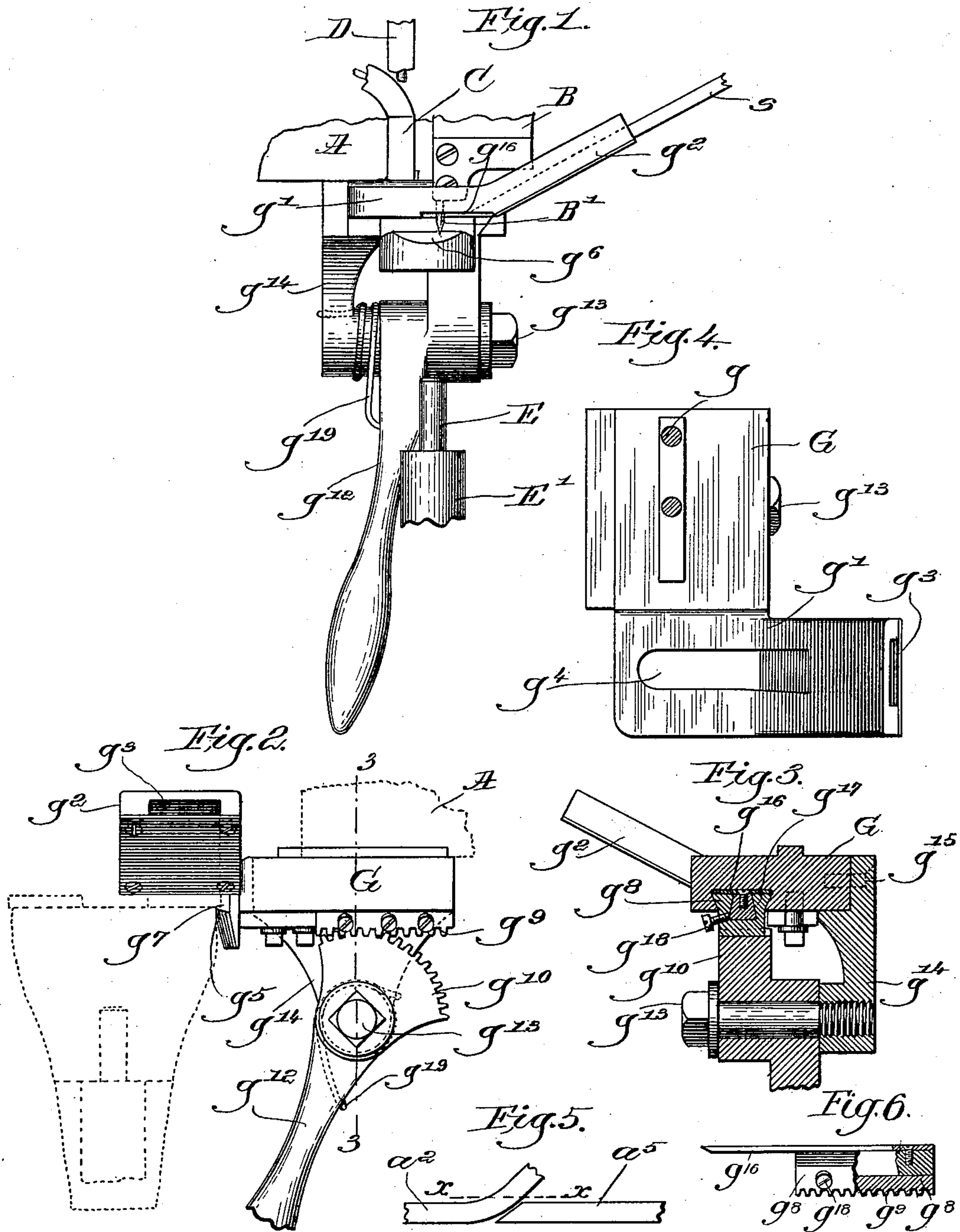
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ATTACHMENT FOR APPLYING WELTS OR RANDS.

(Application filed Apr. 24, 1901.)

(No Model.)



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## ATTACHMENT FOR APPLYING WELTS OR RANDS.

SPECIFICATION forming part of Letters Patent No. 689,532, dated December 24, 1901.

Application filed April 24, 1901. Serial No. 57,173. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM B. ARNOLD, a citizen of the United States, residing at North Abington, county of Plymouth, State of Massachusetts, have invented an Improvement in Attachments for Applying Rands, Welts, or the Like to Shoes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention is an apparatus to be used in connection with any usual nailer or pegging-machine, the object thereof being to facilitate the application of a welt or rand, and is particularly applicable to applying the heel end of a half-sole shoe—such, for example, as is shown in my United States Patent No. 635,118, dated October 17, 1899. As heretofore practiced it has been necessary first to prepare the leather strip by hand, beveling one end thereof to lap over on the adjacent end of the half-sole, and then tack the same in place, bending the strip around as the tacking or nailing proceeds, and when completed the opposite end of the strip is carefully cut and fitted in place and tacked down, all this hand labor being slow, expensive, and requiring skill. Accordingly I have provided the hereinafter-described mechanism for performing the above operation by machine.

The constructional details and operation of my invention will be more fully pointed out in the course of the following description, reference being had to the accompanying drawings, in which I have shown a preferred embodiment of my invention, and the latter will be more particularly set forth in the appended claims.

In the drawings, Figure 1 is a front elevation showing my attachment applied to a pegging-machine, the latter being mainly broken away, only enough thereof being shown to illustrate the application thereto of my invention. Fig. 2 is a side elevation thereof, showing in dotted lines a shoe and its last mounted in operative position. Fig. 3 is a sectional view on the line 3-3, Fig. 2. Fig. 4 is a top plan view of the attachment, the securing-bolts being shown in section. Fig. 5 is an edge elevation showing a half-sole and a heel-end strip, said figure showing said parts somewhat exaggerated in position for clear-

ness of illustration. Fig. 6 is a side elevation of a knife and its supporting-slide.

As already mentioned, my invention is applicable to any of the usual boot and shoe nailers or pegging-machines in which usually the material is fed along automatically by the perforating-awl.

In the accompanying drawings, illustrating my invention, A represents part of the front end or face of the head of the machine; B, the awl-bar, having an awl B' for feeding the stock; C, the wire-carrier, which operates to cut off a wire nail to be driven by the driver D; E, a last pin at the upper end of a horn or part E'. All of said parts are of usual construction.

To the base A is bolted by bolts *g* a block G, which carries at its front end a guide *g'*, preferably having a lateral and upwardly-extending end *g''*, down which the strip of welt or material *s* is fed, the guide *g'* having a throat *g'''* for this purpose. At its lower end the guide *g'* is provided with an elongated opening *g''''*, in which the awl B' operates.

As the operation of the awl and nail carrier and driver is well known, it is unnecessary to enter into a full explanation thereof, it being sufficient to say that the awl reciprocates up and down for making the holes and is shifted laterally toward the left, Fig. 1, for feeding the welt beneath the nail-driving mechanism C D.

Beneath the guide *g'* and at the lower front end of the block G is a rest or gage *g<sup>5</sup>*, preferably having a beveled or rounded surface excepting at its front upper edge, where it has a plane portion *g<sup>6</sup>*, against which the body of the shoe rests, and above this part is a notch *g<sup>7</sup>*, which constitutes the gage proper for the welt, the parts occupying in use the position shown in dotted lines in Fig. 2. Extending lengthwise of the block and preferably occupying a suitable flanged recess, shown herein as in the shape of a dovetail groove, is a slide *g<sup>8</sup>*, provided with teeth *g<sup>9</sup>* on its under side, in mesh with a suitable operating device (shown as a toothed sector *g<sup>10</sup>*) at the end of an operating-handle *g<sup>12</sup>*, pivoted at *g<sup>13</sup>* to a hanger *g<sup>14</sup>*, bolted at *g<sup>15</sup>* on the back side of the block G. The rack *g<sup>9</sup>* and its slide *g<sup>8</sup>* serve to carry a knife or cut-off device whose blade *g<sup>16</sup>* is secured to a back piece



$g^{17}$ , adjustably mounted in the slide  $g^8$  and held in proper adjustment by set-screws  $g^{18}$ . The forward end of the blade  $g^{16}$  is properly sharpened to cut the leather strip as desired and is normally held in retracted position by a spring  $g^{19}$ .

In use the leather strip is fed down the throat  $g^3$  of the guide  $g'$  by the lateral movement of the awl  $B'$ , and as it is fed along it is automatically nailed in place around the heel of the shoe, in the position shown in my before-mentioned patent, and when the strip has been brought around to the other side of the shoe against the half-sole the operator quickly turns the handle back to the right, Fig. 2, thereby instantly severing the strip along the dotted line  $x x$ , Fig. 5, thus not only cutting off the strip level with the bottom of the sole, but leaving the free end of the remaining strip in the guide at the proper bevel to match onto the half-sole of the next shoe.

In Fig. 5 I have indicated a half-sole  $a^5$ , and a heel-end strip  $a^2$ , from which the preceding description will be made clear.

The angular arrangement of the guide causing, as it does, a bend in the leather at the point where the leather strip unites with the shoe, taken together with the fact that the knife is on a level with the bottom of the sole, permits the single movement mentioned of the operating-lever to sever the welt along the line  $x x$  and leaves the parts in finished position, cutting off the heel-end strip on the required bevel, thereby enabling the machine to apply the heel end quickly, accurately, and economically, accomplishing in a moment what has heretofore required a considerable length of time to do by hand.

I am aware that many minor changes may be resorted to in form and arrangement of parts within the spirit and scope of my invention.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the kind described, a guide for a leather strip, a rest or gage beneath said guide for receiving a shoe, and a knife set obliquely to said guide and parallel to said gage for severing the strip obliquely on a level with the bottom of the shoe.

2. In a device of the kind described having a feeding device, a guide for a leather strip, said guide being provided with a throat along which the strip may pass, and having at one end thereof a feeding opening or slot, for co-operating with said feeding device, said guide having its lower end at said opening arranged to receive a shoe on which said strip is fed and secured, and means for cutting off the strip next to an adjacent layer of leather with a close joint having the exposed surfaces of the leather level.

3. In a device of the kind described, a guide for a leather strip, said guide being provided

with a throat along which the strip may pass, and having at one end thereof a feeding opening or slot, said guide having its lower end at said opening arranged to receive a shoe on which said strip is fed and nailed, and a knife for cutting off the strip next to an adjacent layer of leather with a close joint having the exposed surfaces of the leather level, a spring normally retaining said knife in retracted position, and an operating-lever for moving the same into cutting position.

4. In a device of the kind described, a block having at one end a guide provided with a portion extending upward obliquely for delivering a strip of leather at an angle thereto, a slide retained in said block and movable toward and from said guide, a knife carried by said slide and movable across the path of the strip delivered by said guide, and a rest against which a shoe may be placed beneath said guide and knife.

5. In a device of the kind described, a block having at one end a guide provided with a portion extending upward obliquely for delivering a strip of leather at an angle thereto, a slide retained in said block and movable toward and from said guide, a knife carried by said slide and movable across the path of the strip delivered by said guide, and a rest against which a shoe may be placed beneath said guide and knife, said knife being supported by a back piece adjustably mounted in said slide.

6. In a device of the kind described, a block having at one end a guide provided with a portion extending upward obliquely for delivering a strip of leather at an angle thereto, a slide retained in said block and movable toward and from said guide, a knife carried by said slide and movable across the path of the strip delivered by said guide, a rest against which a shoe may be placed beneath said guide and knife, said slide having rack-teeth, and an operating-handle provided with a toothed segment meshing with said rack for operating said knife.

7. In a device of the kind described, a block having at one end a guide provided with a portion extending upward obliquely for delivering a strip of leather at an angle thereto, a slide retained in said block and movable toward and from said guide, a knife carried by said slide and movable across the path of the strip delivered by said guide, and a rest against which a shoe may be placed beneath said guide and knife, said rest having a notch immediately beneath said guide for receiving the edge of the strip delivered by the guide.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

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Witnesses:

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